News and Views from the Literature

Male Infertility

Varicoceles: Practice Guidelines

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The efficacy of the treatment of varicoceles in the infertile male patient still engenders controversy. In 2001, the American Urological Association published its Best Practice guidelines on varicocele and male infertility, and this set of recommendations was recently updated by the American Society of Reproductive Medicine (ASRM). Following are some of the highlights from that ASRM report, which should be a guide for the practicing urologist.

Report on Varicocele and Infertility Practice Committee of the American Society for Reproductive Medicine.

Fertil Steril. 2006;86(5 suppl):S93-S95.

Varicoceles, which are found in 15% of the normal male population, occur in about 40% of men who present with infertility. Varicoceles are first recognizable clinically at the onset of adolescence. Therefore, any adolescent with a varicocele who has a decrease in size of the ipsilateral testis should have that varicocele corrected, and adolescents who do not have any change in testis size should be followed expectantly until such a change in testis size becomes apparent.

Men with varicoceles and normal semen parameters should be followed conservatively with annual or biannual semen analyses. However, patients with an abnormal semen analysis, particularly those who are seeking treatment for infertility, should be offered correction of their varicocele. An abnormal semen analysis should always be confirmed by at least a second semen analysis.

Treatment of a varicocele may be either surgical or via percutaneous venous embolization of the gonadal veins.

Because the life cycle of a sperm is about 90 days, posttreatment semen analyses should be performed at 3-month intervals for at least a year or until pregnancy occurs.

For anyone else who is interested in infertility per se, the ASRM report is a good synopsis of the most up-to-date data on the topic.

Urinary Incontinence

Lower Urinary Tract Symptoms and the Placebo Effect

Reviewed by Akira Furuta, MD, Michael B. Chancellor, MD Department of Urology, University of Pittsburgh Medical Center, Pittsburgh, PA

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here are many articles on the use of drugs to treat overactive bladder and benign prostatic hyperplasia (BPH). Yet, many of us have wondered, "How much better are these pills than placebo, really?" Investigators at the Antonius Hospital in Nieuwegein, The Netherlands, reviewed placebo responses in randomized controlled trials of pharmacologic treatment for lower urinary tract symptoms (LUTS), including urinary incontinence, overactive bladder, and BPH.

The Placebo Effect in the Pharmacologic Treatment of Patients With Lower Urinary Tract Symptoms

van Leeuwen JH, Castro R, Busse M, Bemelmans BL, Eur Urol. 2006;50:440-453.

Van Leeuwen and colleagues assessed review articles on placebo effects in nonurologic disorders to compare the magnitude of placebo responses in drugs for LUTS with those reported for other diseases. The investigators searched Medline (English language, publication between 1990 and 2005) using the Medical Subject Headings term "placebo effect." Data on file at the US Food and Drug Administration and the European Medicines Agency were also reviewed.

Placebo treatment of LUTS yielded reductions in incontinence episodes ranging from 32% to 65%, whereas prostate or urinary incontinence symptom scores were reduced by 9% to 34%. Genuine drugs decreased incontinence episodes by 45% to 77% and symptom scores by 22% to 45%. Placebo responses were significantly lower when objective changes in voided volume or peak flow rate were assessed.

The placebo effect in LUTS has a strong behavioral component as patients become aware of their voiding habits and potential risk factors. Symptom severity, treatment naivety, study duration, and interaction with health care providers may also influence placebo effect.

The bottom line is that placebo works pretty well for most LUTS, and physicians and the pharmaceutical industry should be modest regarding their ability to treat this patient population. Proper patient selection, study duration, and objective and subjective outcome measures may better separate treatment effects. Interestingly, the placebo rate was greater for bladder than for prostate drugs. The reason may be related to the observation that placebo treatment has no beneficial effect on prostate growth or the occurrence of acute urinary retention. Urologists should keep the placebo effect in mind when reviewing any publication on LUTS.

Minimally Invasive Procedures for Urinary Incontinence

There are potential advantages to a laparoscopic approach for the repair of urinary incontinence and pelvic prolapse, but at present it is not very popular in female urology. The reasons for and against laparoscopic bladder suspension are nicely discussed in a recent review.

Laparoscopic Burch Colposuspension and the Tension-Free Vaginal Tape Procedure Paraiso MF.

Curr Opin Obstet Gynecol, 2006:18:385-390.

The advantages of laparoscopy include more cosmetic incisions, shortened length of hospital stay, decreased analgesia requirement, rapid recovery, and rapid return to work. Other desired advantages are decreased operative time and decreased cost. A decade ago, laparoscopic Burch colposuspension was at the forefront of minimally invasive anti-incontinence surgery, followed shortly thereafter by the increasingly popular and widespread tension-free vaginal tape (TVT) procedure. Paraiso at the Cleveland Clinic reviewed 3 recent studies comparing TVT with laparoscopic Burch colposuspension.

Subjective and objective cure rates seem to be similar between laparoscopic and TVT procedures. Operative times were significantly longer for the laparoscopic Burch group. Hospital stay and duration of catheterization did not differ between groups. Total hospital cost was comparable between procedures. Given this finding in combination with nonsuperior cure rates, the TVT procedure seems to be superior to the laparoscopic Burch colposuspension.

What are the implications for clinical practice and future research? Are there any clinical indications for utilization of the laparoscopic Burch colposuspension in the presence of the time-efficient TVT and transobturator tape surgery? A subset of skilled laparoscopic surgeons will continue to perform these procedures because of surgeon preference or when performing concomitant laparoscopic surgery. Patients who desire future vaginal delivery, have known retropubic bowel adhesions or a femoralfemoral bypass graft, have had previous inguinal hernia repair with mesh, or have allergy to or no desire for synthetic mesh are not candidates for retropubic synthetic sling procedures. A resurgence of laparoscopic Burch procedures will not ensue, despite recent evidence of noninferiority to open colposuspension. To be good at laparoscopic repair of pelvic prolapse, anatomic knowledge and surgical skill in the space of Retzius are important and must be learned. Whether the TVT sling operation is the new gold standard is not the issue here. Randomized clinical trials comparing TVT with TOT are under way.

From his review, Paraiso concluded that cure rates for laparoscopic Burch colposuspension are equal to those for TVT. Publications regarding laparoscopic Burch colposuspension have tapered significantly in the last 18 months, which may represent the ebb of its utilization except in expert hands.